



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

jd

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/542,733

.07/20/2005

Motoaki Kamachi

Q89240

5404

23373 7590 09/14/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

LILLING, HERBERT J

ART UNIT

PAPER NUMBER

1657

MAIL DATE

DELIVERY MODE

09/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10542733	7/20/05	KAMACHI ET AL.	Q89240

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

HERBERT J. LILLING

ART UNIT	PAPER
1657	20070910

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The reply filed on September 4, 2007 has been to to be bona fide, but the election of D drawn to "acyl group receptor" drawn to Species D: hydroxy alkanoate and poly (hydroxy alkanoate).

Examples of Species I are disclosed, for instance, at page 16, line 25 to page 17, line 3, at page 17, line 25 to page 18, line 4, and at page 23, line 13 to page 24, line 25. See also Examples 7 and 8 have been considered to be not fully supported in view the disclosure in the instant specification.

The specification discloses the following as noted especially for the underlined portion by this Examiner:

Acyl Group Receptor

[0078] With regard to the acyl group receptor used in the highly efficient acyl group transfer reaction according to the present invention, there is no limitation so far as it is able to be used as a substrate for the above CoA enzyme. When a substrate specificity of the enzyme is changed by the reaction condition or when a mutant where the substrate specificity is modified by means of protein engineering is used, a substance which is not usually an appropriate substrate for the enzyme is also able to be used as an acyl group receptor.

[0079] Preferred acyl group receptors are amino acid and amino acid derivative and particularly preferred ones are natural amino acid and nonnatural amino acid. For example, when an amino acid is serine and an enzyme is serine C-palmitoyl transferase, an efficient synthetic reaction for 3-ketodihydrosphingosine is resulted. When an acyl group receptor is sphingosine which is an amino acid derivative and an enzyme is sphingosine N-acyl transferase, an efficient synthetic reaction for ceramide is resulted. Incidentally, a product in the acyl group transfer reaction does not always have a transferred acyl group as it is but may be decarboxylated or rearranged under the reaction condition and, generally, it depends upon the enzyme and the substrate used therefor.

According to the above, the expression "acyl group receptors" is "no limitation" which renders the claims vague and indefinite as to the scope due to "it is able to be used". Applicant has alleged that D species is hydroalkanoate and poly(hydroxy alkanoate) which disclosure does not support the above generic terms for "acyl group receptors".

Applicant has pointed out that Examples 7 and 8 are drawn to the above, however, these two examples have subject matter for these examples whereby the "enzyme" employed is unknown which would probably be indicated as rendering the claimed subject matter as being non-supported.

It is also noted that there will probably be a question as to whether the claimed subject matter is within the scope of meeting the utility requirements as a "system" containing functional groups to define the invention(s). Functional language cannot be examined nor does it sufficiently describe the reactants and the products produced. Textbook knowledge will require analysis of the functional claims in accordance with the Supreme Court KSR case absent suitable claimed language for a search and examination of reactants containing fully knowledge of the structure(s) which are reacted with having specific enabling enzyme(s) with acyl group receptors having specific structures to form the product(s).

Applicant is requested to indicate support for "acyl group donor" who is generic to both of the elected species as noted in the response filed.

Applicant is given ONE (1) MONTH or THIRTY (30) DAYS from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lilling whose telephone number is 571-272-0918 and Fax Number is 571-273-8300. or SPE Jon Weber whose telephone number is 571-272-0925. Examiner can be reached Monday-Friday from about 7:30 A.M. to about 7:00 P.M. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.J.Lilling: HJL
(571) 272-0918
Art Unit 1657
September 10, 2007.



HERBERT J LILLING
Primary Examiner
Art Unit: 1657